CLAIMS

What is claimed is:

1. A method for integrating internal alarms generated by a process control system and external alarms generated by external equipment that is not a part of the process control system comprising:

receiving, at the process control system, an external alarm, the external alarm including an external tag identifying an origin of the external alarm;

pre-determining and mapping an internal alarm associated with the external alarm;

pre-determining an internal tag associated with the external tag based on the mapping; and

generating, at the process control system, the internal alarm when the external alarm is received.

2. The method according to Claim 1, wherein receiving the external alarm comprises retrieving the external alarm from a log file.

3. The method according to Claim 1, wherein receiving the external alarm comprises receiving the external alarm over a communications link.

4. The method according to Claim 1, wherein determining the internal alarm comprises:

comparing the external alarm to at least one entry associated with the mapping;

determining a match between the external alarm and a selected one of the entries; and

selecting the internal alarm based on the selected one of the entries.

5. The method according to Claim 1, wherein determining the internal tag comprises:

comparing the external tag to at least one entry associated with the mapping;

determining a match between the external alarm and a selected one of the entries; and

selecting the internal tag based on the selected one of the entries.

6. The method according to Claim 1 and further comprising:

determining a priority associated with the internal alarm based on the external alarm;

displaying the internal alarm at the process control system; and

handling, by an operator, the internal alarm at the process control system.

7. The method according to Claim 6 and further comprising updating the external alarm at the external system based on the handling of the related internal alarm at the process control system.

8. A system for integrating internal alarms generated by a process control system and external alarms generated by external equipment that is not a part of the process control system comprising:

software encoded on a computer readable medium and operable to:

receive, at the process control system, an external alarm, the external alarm including an external tag identifying an origin of the external alarm;

pre-determine and map an internal alarm associated with the external alarm;

pre-determine an internal tag associated with the external tag based on the map; and

generate, at the process control system, the internal alarm when the external alarm is received.

9. The system according to Claim 8, wherein receiving the external alarm comprises retrieving the external alarm from a log file.

10. The system according to Claim 8, wherein receiving the external alarm comprises receiving the external alarm over a communications link.

11. The system according to Claim 8, wherein determining the internal alarm comprises the software being further operable to:

compare the external alarm to at least one entry in the map;

determine a match between the external alarm and a selected one of the entries; and

select the internal alarm based on the selected one of the entries.

12. The system according to Claim 8, wherein determining the internal tag comprises the software being further operable to:

compare the external tag to at least one entry in the map;

determine a match between the external alarm and a selected one of the entries; and

select the internal tag based on the selected one of the entries.

13. The system according to Claim 8 and further comprising the software being further operable to:

determine a priority associated with the internal alarm based on the external alarm;

display the internal alarm at the process control system; and

handle, by an operator, the internal alarm at the process control system.

14. The system according to Claim 13 and further comprising the software being further operable to update the external alarm at the external system based on the handling of the related internal alarm at the process control system.

15. A system for integrating internal alarms generated by a process control system and external alarms generated by external equipment that is not a part of the process control system comprising:

means for receiving, at the process control system, an external alarm, the external alarm including an external tag identifying an origin of the external alarm;

means for pre-determining and mapping an internal alarm associated with the external alarm;

means for pre-determining an internal tag associated with the external tag based on the mapping; and

means for generating, at the process control system, the internal alarm when the external alarm is received.

16. A method for generating alarm and tag relations comprising:

selecting at least one external tag associated with an external system;

determining at least one internal tag related to the external tags, the internal tag being associated with a process control system;

generating at least one entry in a map indicating a relation between at least one of the external tags and at least one of the internal tags;

selecting at least one external alarm associated with the external system;

determining at least one internal alarm related to the external alarms, the internal alarm being associated with the process control system; and

generating at least one entry in the map indicating a relation between at least one of the external alarms and at least one of the internal alarms.

17. The method according to Claim 16, wherein the external tags are selected based on predetermined criteria.

18. The method according to Claim 17, wherein the predetermined criteria comprises external tags to be monitored by the process control system.

19. The method according to Claim 16, wherein determining the internal tags related to the external tags comprises:

determining a match between at least one of the external tags and at least one of the internal tags; and

selecting the internal tags that are matched to the external tags.

20. The method according to Claim 19, wherein the match is determined based on any of a heuristic, an exact match, a partial match or a user determined match.

21. The method according to Claim 16, wherein the external alarms are selected based on predetermined criteria.

22. The method according to Claim 21, wherein the predetermined criteria comprises external alarms to be monitored by the process control system.

23. The method according to Claim 16, wherein determining the internal alarms related to the external alarms comprises:

determining a match between at least one of the external alarms and at least one of the internal alarms; and

selecting the internal alarms that are matched to the external alarms.

24. The method according to Claim 23, wherein the match is determined based on any of a heuristic, an exact match, a partial match or a user determined match.

25. A system for generating alarm and tag relations comprising:

software encoded on a computer readable medium and operable to:

select at least one external tag associated with an external system;

determine at least one internal tag related to the external tags, the internal tag being associated with a process control system;

generate at least one entry in a map indicating a relation between at least one of the external tags and at least one of the internal tags;

select at least one external alarm associated with the external system;

determine at least one internal alarm related to the external alarms, the internal alarm being associated with the process control system; and

generate at least one entry in the map indicating a relation between at least one of the external alarms and at least one of the internal alarms.

26. The system according to Claim 25, wherein the external tags are selected based on predetermined criteria.

27. The system according to Claim 26, wherein the predetermined criteria comprises external tags to be monitored by the process control system.

28. The system according to Claim 25, wherein determining the internal tags related to the external tags comprises the software being further operable to:

determine a match between at least one of the external tags and at least one of the internal tags; and

select the internal tags that are matched to the external tags.

29. The system according to Claim 28, wherein the match is determined based on any of a heuristic, an exact match, a partial match or a user determined match.

30. The system according to Claim 25, wherein the external alarms are selected based on predetermined criteria.

31. The system according to Claim 30, wherein the predetermined criteria comprises external alarms to be monitored by the process control system.

32. The system according to Claim 25, wherein determining the internal alarms related to the external alarms comprises the software being further operable to:

determine a match between at least one of the external alarms and at least one of the internal alarms; and

select the internal alarms that are matched to the external alarms.

33. The system according to Claim 32, wherein the match is determined based on any of a heuristic, an exact match, a partial match or a user determined match.

34. A system for generating alarm and tag relations comprising:

means for selecting at least one external tag associated with an external system;

means for determining at least one internal tag related to the external tags, the internal tag being associated with a process control system;

means for generating at least one entry in a map indicating a relation between at least one of the external tags and at least one of the internal tags;

means for selecting at least one external alarm associated with the external system;

means for determining at least one internal alarm related to the external alarms, the internal alarm being associated with the process control system; and

means for generating at least one entry in the map indicating a relation between at least one of the external alarms and at least one of the internal alarms.